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### Abstract

The invention relates to a method for the mounting of an add-on part (3) on a workpiece (1), in particular on a vehicle body, the intention being for the add-on part (3) to be aligned on the workpiece (1) in a precisely positioned manner in relation to a reference region (12, 13). For this purpose, use is made of a robot-guided mounting tool (5) which is connected fixedly to a sensor system (20). In order to achieve the precisely positioned alignment of the add-on part (3), an iterative control operation is run through, in the course of which first of all an (actual) measured value of the sensor system (20) is produced and is compared with a (desired) measured value produced within the context of a setting-up phase. A movement vector of the mounting tool (5) is calculated from the difference between the (actual) measured value and (desired) measured value using a Jacobi matrix calculated within the context of the setting-up phase, and the mounting tool (5) with the add-on part (3) fixed therein is iteratively displaced in relation to the workpiece (1) by these movement vectors until the desired position is reached. This positioning task can be resolved without a metric calibration of the sensor system (20).

(Figure 2a)